Lecture 4 Worksheet

Applying Norman’s 7-stage model
(to be done in pairs)

This activity is based on an excerpt of Alison Gopnik’s TED talk, “What do babies think?”

PART 1 – Watch the video, then complete questions 1-2 after the 1st example (instructor will pause the video). In this study (a talkaloud observation!), a 4-year-old first learns that “yellow blickets make the light go on, and red ones don’t.” Then he is shown an anomaly and have to figure it out.

1. What is the little boy’s ‘goal’ in this scenario?

2. a) Describe the gulf of execution in this scenario. What intentions does the boy have? What visible and allowed actions are there? Distinguish “goal” and “intention to act”.

   b) How does the boy complete each step to cross this gulf?

   Gulf of execution
   1. form intention to act:

   2. decide on sequence of actions:

   3. execute action sequence:
Complete the following questions after the 2nd example (instructor will pause the video)

3. a) Describe the **gulf of evaluation** in this scenario. What is the system’s state? What is the user’s understanding of the state?

b) How does the boy complete each step to cross this gulf?

**Gulf of evaluation**
1. perceive the state of the world

2. interpret the perceived state

3. evaluate system with respect to goals

c) Has the boy’s mental model changed? If so, what is the change? What was the change in response to?

**PART 2** - Complete the following questions after watching the entire video.

4. After the boy’s final attempt, do you think the boy’s mental model matched the system model?

5. What would *you* do next to determine how the control of the light actually worked?